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ABSTRACT

This study was designed primarily to evaluate the effectiveness of three multi-age classes at Carnarvon School, Vancouver, B.C. (each class having an age range of three years: ages 6-8, 7-9, 9-11) in developing children's self-concepts and attitudes toward school. No significant difference was found between the multi-age and regular classes in mean raw scores on the Self-Concept Scale and Pupil Behaviour Inventory employed in the study. In addition, the study aimed to evaluate the effectiveness of the innovation in promoting individualization of instruction and in encouraging children to help each other with school work. The study also sought the opinions of teachers and children in the multi-age classes regarding the innovation. The opinions of the teachers of the two younger multi-age classes were very positive; but the teacher of the oldest multi-age class felt that the innovation was ineffective. All three teachers felt that special care should be taken in the placement of children in multi-age classes. The children's opinions were consistent with the teachers' opinions in most matters pertaining to the innovation. Finally, the study attempted to determine whether multi-age classes achieved at least as well as regular classes in basic reading and arithmetic skills. Reading achievement scores from the Gates-MacGinitie Test were obtained at the Grade 5 level, and these data were analyzed with I.Q. scores from the Henmon-Nelson Test as a covariate. Arithmetic achievement scores were obtained from the Vancouver Surveys at the Grade 3 and Grade 6 levels. The results are provided. (Author/DB)

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RESEARCH REPORT

An Evaluation of Multi-Age Classes at Carnarvon School, 1971-72

June 30, 1972

Robert R. Hoen

Research Report 72-15

Department of Planning and Evaluation
Board of School Trustees
1595 West 10th Avenue
Vancouver 9, B. C.

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AN EVALUATION OF MULTI-AGE CLASSES AT CARNARVON SCHOOL 1971-72

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Robert R. Hoen

Research Report 72-15

Mr. Hoen is a doctoral student in Educational Administration at the University of British Columbia. His faculty adviser is Dr. Ian E. Housego. Mr. Hoen conducted this study of multi-age classes at Carnarvon School during an internship with the Vancouver School Board under the supervision of Dr. E. N. Ellis. The statistical analyses were made by Mrs. Kathy J. Gilbert, Research Assistant with the Vancouver School Board. The cooperation of Mr. W. L. Magar, Principal of Carnarvon Elementary School, and the assistance of his staff are gratefully acknowledged.

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AN EVALUATION OF MULTI-AGE CLASSES AT CARNARVON SCHOOL 1971-72

Abstract

This study was designed primarily to evaluate the effectiveness of three multi-age classes at Carnarvon School (each class having an age range of three years: ages 6-8, 7-9, 9-11) in developing children's self-concepts and attitudes toward school. No significant difference was found between the multi-age and regular classes in mean raw scores on the Self-Concept Scale and Pupil Behaviour Inventory employed in the study.

In addition, the study aimed to evaluate the effectiveness of the innovation in promoting individualization of instruction and in encouraging children to help each other with school work. Instruction was more individualized in the multi-age classes than in most of the regular classes, but this difference was found only with respect to the pace of instruction and only in certain subjects. Children were encouraged to help each other more in those areas in which the pace of instruction was more individualized.

The study also sought the opinions of teachers and children in the multi-age classes regarding the innovation. The opinions of the teachers of the two younger multi-age classes were very positive; but the teacher of the oldest multi-age class felt that the innovation was ineffective because the older children preferred to associate with others of their own age-sex group. All three teachers felt that special care should be taken in several respects in the placement of children in multi-age classes. The children's opinions were consistent with the teachers' opinions in most matters pertaining to the innovation.

Finally, the study attempted to determine whether multi-age classes achieved at least as well as regular classes in basic reading and arithmetic skills. Reading achievement scores from the Gates-MacGinitie Test were obtained at the Grade 5 level in November and May, and these data were analyzed with I.Q. scores from the Henmon-Nelson Test as a covariate. In the Comprehension subtest, the difference between the multi-age class and the regular classes was significant in favour of the regular classes after allowance was made for individual differences in mental ability. In the Total Score and in the other subtests of the Gates-MacGinitie, there were no significant differences. Arithmetic achievement scores were obtained from the Vancouver Surveys at the Grade 3 and Grade 6 levels. Significant differences were found in favour of the regular classes at the Grade 3 level, but the meaning of this finding was questionable because of the placement of many previously low achievers in the multi-age classes at that particular grade level. Grade 6 arithmetic scores indicated a difference in favour of the regular classes but could not be tested for statistical significance because of the small number of children at that level in the multi-age class.

AN EVALUATION OF MULTI-AGE CLASSES AT CARNARVON SCHOOL 1971-72

The Purpose and Composition of Multi-Age Classes at Carnarvon School

The educational purpose of multi-age classes at Carnarvon School was to enhance children's self-concepts and attitudes toward school. The rationale for employing multi-age classes to accomplish this purpose was that the teacher of a multi-age class necessarily emphasizes the individuality of the child; and that the children in a multi-age class derive security and pride from helping each other learn. The nature of the educational objective and rationale implied as intermediate goals the individualizing of instruction and the encouraging of children to help each other.

Related to the educational purpose of the program were two other kinds of considerations. One was the Board's policy to offer alternate programs in each local community. The other was the need to facilitate school organization at a time when the numbers of pupils in certain grades made inconvenient the usual type of class composition.

Three multi-age classes were created in September 1971, each having an age range of three years: ages 6-8, ages 7-9, and ages 9-11. The two younger classes were assigned adjoining rooms and taught cooperatively; the oldest class was situated in a different part of the school building and taught separately from the other multi-age classes. The 7-9 and 9-11 classes represented continuations of multi-age classes that were established in the 1970-71 school year. The 7-9 class contained a disproportionate number of children who presented learning and behaviour problems; the three multi-age classes as a group did not, however, have that characteristic.

Review of Related Literature

A multi-age class is simply a class composed of children of several different ages. Multi-age classes were common by necessity in the early history of Canadian education, when very small schools were typical. With the consolidation of school districts and the institution of graded organization, multi-age classes almost disappeared. In recent years, multi-age classes have been viewed by some educators as desirable for educational reasons, largely as a result of the influence of English informal primary schools.

The multi-age class is thought to be desirable for a variety of reasons:

(a) It is said to encourage individualization of instruction by reducing the number of children of any one age working with any one teacher.

(b) It is seen as encouraging older children to help younger children to learn.

(c) The multi-age class is thought to help children to feel more secure because of belonging to a family-like group in school.

(d) It is said to improve home-school cooperation, if more than one child from a given family are in the same class. (Ridgway and Lawton, 1969)

There is a need to investigate the relationship between multi-age class composition and the variables it is intended to affect. Empirical research on this subject is lacking.

"Individualization of instruction" is a phrase too often used without any clear notion of definition. Gibbons (1970) has made a very useful study of the concept. In his view, the first question that must be answered in classifying individualized instructional practices is: Does the teacher regularly direct instruction to each student separately in some way, or does the teacher generally address the same form of instruction to more than one student, to groups? The second question in Gibbons' scheme of classification is: What is the role of the teacher in decision-making? Is he actively in control, making all but a few decisions? Is he permissive in the instructional program, allowing or encouraging the student to make most of his own curricular decisions? Or does his approach lie between these extremes? Is he responsive, planning cooperatively? Gibbons has devised a system for profiling individualized programs in terms of fifteen elements of instruction and four levels of individualization. Applications of Gibbons' profile demonstrate that often programs which claim to be individualized are actually individualized only in one or two respects. It is particularly common for only the pace of study to be individualized, while materials, methods, and other elements of instruction remain standardized.

The English informal primary school, from which the trend toward multi-age classes is largely derived, is much more consistently individualized than most other programs. (See Gibbons, p. 46, Figure 6.) The Leicestershire program is based on a fundamental commitment to student decision-making.

Other than the recent book by Ridgway and Lawton on family grouping in the English primary school, the only thorough analysis of multi-age grouping found by this reviewer is an article by Wolfson (1967), whose views fit closely those of both Gibbons and the Leicestershire program. Wolfson advances multi-age grouping as an organizational means to improved individualization, and emphasizes the need for a clear understanding of the concept of individualization. As Wolfson sees it, there are two conflicting approaches to individualization which are based on different conceptions of the teacher's role:

(1) the diagnostician approach, in which the teacher decides what the individual child needs to do;

(2) the consultant or resource person approach, in which the teacher manages the class environment, helps children learn to plan and evaluate, makes children aware of possibilities, supplies a variety of materials, provides stimulating experiences, and responds both to requests of children and to her own guess about what materials and opportunities might be appropriate. Wolfson takes the position that individualization in its true form should provide for individualized curricula, planned and evaluated jointly by the teacher and the child.

The Study Problem

The primary problem of this research study was: Did the children in the multi-age classes at Carnarvon School acquire better self-concepts and attitudes toward school than the children in the regular classes?

Secondary questions guiding the study were: Was instruction in the multi-age classes more individualized than in the regular classes? Did teachers encourage children to help each other more in the multi-age classes?

Thirdly, what were the opinions of teachers and pupils in the multi-age classes regarding the innovation?

Finally, although it was not a goal of the multi-age classes at Carnarvon to achieve better than regular classes in cognitive skills, the question was asked: Did the multi-age classes achieve at least as well as the regular classes in basic reading and arithmetic skills?

Design of the Study

To measure children's self-concepts and attitudes toward school, two questionnaire instruments were used: a Self-Concept Scale to which the children responded (see Appendix A) and a Pupil Behaviour Inventory (PBI) completed by the teachers (see Appendix B).

The Self-Concept Scale was a composite developed by Marilyn J. Reid from the work of Shapson and others. It consists of 80 items to which the child responds "true" or "not true", yielding a simple numerical score on a scale of zero to 80. The Self-Concept Scale was administered to all pupils in the multi-age classes and to all in Grades 2 through 6 in regular classes.

The PBI contains items for each of five categories: classroom conduct, academic motivation, socio-emotional state, teacher dependence, and personal behaviour. The PBI was completed for all children in the multi-age classes and for one-third of the children in the regular classes, randomly selected.

The significance of the difference between the means for the multi-age and regular classes in the Self-Concept scores and in each of the five subscores of the PBI was determined by a "t" test.

These measurements, as well as those in another part of the study explained below, are very much limited by the lack of a pre-post design, due to the late timing of the evaluation request. Findings therefore cannot be interpreted as indicating whether changes in self-concept or attitudes toward school occurred as a result of multi-age class composition.

To compare multi-age and regular classes with respect to individualization of instruction and children helping each other, a series of observations and interviews was carried out. In this part of the study, the conceptual work of Gibbons was useful.

To determine the opinions of teachers and pupils regarding the innovation, interviews were conducted with each of the three teachers of multi-age classes and with one-fourth of the children in the multi-age classes. The children were interviewed in two groups, one group from the two younger classes and one group from the oldest class.

To measure reading achievement, the Gates-MacGinitie Test, Survey D, Form 1M, was administered in May, 1972, to all fifth-grade pupils in both multi-age (N=12) and regular (N=46) classes, so that available scores of fifth-grade pupils on the same form of the same test in November, 1971 could be utilized. In addition, the Henmon-Nelson Test of Mental Ability (for Grades 3-6, Form B) was administered to all of the fifth-grade pupils so that the significance of any differences found in reading achievement could be determined by an analysis of the covariance of reading scores and I.Q. scores. The measurement of reading achievement is limited to fifth-grade pupils, but it is the most statistically sound part of the study.

To measure arithmetic achievement, scores available from the Vancouver Grade 3 and Grade 6 Surveys were used. The significance of differences between the mean scores of experimental and control groups on the Grade 3 test was determined by a "t" test. Differences in the mean scores on the Grade 6 test could not be tested for significance because of the small number of Grade 6 pupils in the multi-age class; but the distributions of the scores were examined. Any inference about arithmetic achievement is, like that for self-concept and attitudes toward school, limited by the lack of a pre-post design.

Findings

Self-Concept Scale -- the difference between the mean raw scores of the multi-age and regular classes on the Self-Concept Scale was not significant. (See Table I)

TABLE I: SUMMARY OF RESULTS ON THE "SELF-CONCEPT SCALE" FOR PUPILS IN MULTI-AGE CLASSES AND REGULAR CLASSES AT CARNARVON ELEMENTARY SCHOOL, VANCOUVER, MAY, 1972

	Multi-Age Classes	Regular Classes
Number of Pupils	73	265
Mean raw score	57.10	57.14
Standard deviation	13.87	11.45
Difference between means	0.04	
"t" value of mean difference	0.02 (n.s.d.)	

Legend: (n.s.d.) - no significant difference

Pupil Behaviour Inventory

The difference between the mean raw scores of the multi-age and regular classes was not significant in any of the five categories of the PBI. It should be noted, however, that these differences were consistently in favour of the pupils in regular classes. (See Table 2)

TABLE II: SUMMARY OF RESULTS ON THE VINTNER'S PUPIL BEHAVIOUR INVENTORY FOR PUPILS IN MULTI-AGE AND REGULAR CLASSES AT CARNARVON ELEMENTARY SCHOOL, VANCOUVER, MAY, 1972

	Classroom Conduct		Academic Motivation		Socio-Emotional State		Teacher Dependence		Personal Behaviour	
	Multi-Age	Regular	Multi-Age	Regular	Multi-Age	Regular	Multi-Age	Regular	Multi-Age	Regular
Number of Pupils	80	83	80	83	80	83	80	83	80	83
Mean Raw Score	4.04	4.07	3.57	3.82	4.13	4.25	3.89	3.90	4.70	4.73
Standard Deviation	0.77	0.97	0.83	0.91	0.74	0.71	0.81	0.97	0.37	0.46
Difference Between Means	0.03		0.25		0.12		0.01		0.03	
"t" Value of Mean Difference	0.19		1.83		1.04		0.07		0.48	
	(n. s. d.)		(n. s. d.)		(n. s. d.)		(n. s. d.)		(n. s. d.)	

Individualization of Instruction

In certain respects, instruction was found to be more individualized in the multi-age classes than in the regular classes. In all three multi-age classes, each child worked at his own pace on a sequence of materials in the arithmetic and language areas. The teachers in all three multi-age classes typically worked with individual children and very small groups in those subjects. Among the eight regular classes studied, two had this same pattern of instruction in language and arithmetic; the other six most commonly divided the class into two or three groups in those subjects.

For language and arithmetic, there was no difference found between multi-age and regular classes in the extent of individualization of instructional materials or methods for studying materials. In effect, the multi-age classes, like the regular classes, were divided into two or three groups with respect to the work the children were expected to do in arithmetic and language--the difference being that in the multi-age classes (and in two of the regular classes) the children worked at individual rates and received the teacher's help individually or in very small groups.

In subjects other than language and arithmetic, there appeared to be no difference between the multi-age and regular classes in the extent of individualization.

Children Helping Each Other

It was observed that children were encouraged to help each other more frequently in those areas in which, as described above, the pace of instruction was more individualized. In those classes in which the teacher's attention was directed to larger groups at any given time, children were found to be more commonly expected to work without helping each other. As noted above, however, the three multi-age classes were not the only ones in which this pattern of individualized pacing and children helping each other was found. Nor was any difference observed between multi-age and regular classes with respect to the extent children helped each other in areas of the program other than arithmetic and language. Typically, those teachers who discouraged children from helping each other in language and arithmetic encouraged them to do so in other areas.

Teachers' Opinions *

The teachers of the two younger multi-age classes (ages 6 through 9) were very enthusiastic about the innovation. They thought that multi-age classes had led them to individualize instruction and encourage children to help each other more than they would have in regular classes. Both thought that multi-age class composition contributed to developing children's self-concepts and attitudes toward school.

*The findings in this part of the study are consistent in every respect with those of A. Moodie's survey of the opinions of 19 teachers of multi-age classes in Vancouver in the 1970-71 school year.

The teacher of the oldest multi-age class (ages 9-11) felt that the innovation was ineffective at that age level. She felt that the older children preferred to associate with those of their own age-sex group.

All three teachers felt that the pupil composition of multi-age classes should not be so heterogeneous that virtually no grouping of pupils for instruction is possible. They also thought that the older children placed in a multi-age class should be more advanced in achievement than the younger ones in the same class; that if some of the older children are behind the younger ones, some of the potential for children to help each other is lost, because the older ones often would not accept the help of the younger ones. All three teachers felt that every child should have in his class others of the same age and sex with whom to be friends.

Children's Opinions

The children in the younger multi-age classes were strongly in favour of the innovation. They liked being able to make friends with children of different ages, and to help each other with school work; and they felt that they got along with each other better than in regular classes. They liked being able to work at their own rate; they felt that they could concentrate better, waste time less, and achieve more. They thought, however, that they were too often unable to get the teacher's help when they needed it, and that their work too often went unmarked. They also thought that the two teachers spent too much time discussing with each other what to do.

The children in the oldest multi-age class had mixed opinions. Of the group interviewed, half preferred multi-age classes and half preferred regular classes. The most important objection to the multi-age class was that there were not enough friends of the same age. Almost all liked the individualized pacing of instruction that they experienced this year, and they did like being able to help each other with their work.

Reading Achievement

The results on the tests used to measure reading achievement and I. Q. are summarized in Table III on the next page.

TABLE III: RESULTS ON THE GATES-MACGINITIE READING TEST, SURVEY D, AND ON THE HENMON-NELSON TEST OF MENTAL ABILITY FOR PUPILS IN THE MULTI-AGE CLASS AND IN REGULAR CLASSES AT THE YEAR 5 LEVEL, AT CARNARVON ELEMENTARY SCHOOL, 1971-72

	N	Henmon-Nelson Mean I.Q.	Gates-MacGinitie Reading Test--Mean Scores							
			Speed and Accuracy		Vocabulary		Comprehension		Total Score	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post
Experimental Group (Multi-Age Class)	12	122.8	61.6	64.1	63.4	62.4	63.3	60.7	188.3	187.2
Control Group (Regular Class)	46	112.3	51.0	55.7	56.6	56.2	55.2	55.0	162.7	166.9

For each of the three subtests and for the total scores on the Gates-MacGinitie Reading Test, an analysis of covariance was carried out to identify significant differences between the multi-age classes and the regular classes. In each instance, the difference between pre-test score and post-test score was used in the analysis with the Henmon-Nelson I. Q. score as the covariate. The results are summarized in Table 4.

TABLE IV: ANALYSIS OF COVARIANCE FOR MULTI-AGE CLASSES VS REGULAR CLASSES ON THE GATES-MACGINITIE READING TEST AT CARNARVON ELEMENTARY SCHOOL, VANCOUVER 1971-72

	Calculated F-Statistic	Conclusion
Speed and Accuracy	0.281	no significant difference
Vocabulary	0.565	no significant difference
Comprehension	4.175	difference significant at the .05 level
Total	2.596	no significant difference

The above results indicate that the differences found on the Speed and Accuracy subtest, on the Vocabulary subtest, and on the Total Score were not significant when the differences in I. Q. had been taken into account. For the Comprehension subtest, however, the difference between the multi-age class and the regular classes was significant after allowance was made for individual differences in mental ability. The difference that occurred on the Comprehension subtest favoured the regular classes.

Arithmetic Achievement

The differences between the mean raw scores of the multi-age and regular classes classes in the total scores and in each of the two parts of the Grade 3 Arithmetic Survey were significant at the .001 level in favour of the regular classes. (See Table V) This finding should, however, be interpreted in light of the fact that a disproportionate number of Grade 3 children with previously unsatisfactory arithmetic achievement were placed in the multi-age classes. Eleven of the 21 Grade 3 pupils in the multi-age classes had unsatisfactory arithmetic achievement in June, 1971.

In the Grade 6 Arithmetic Survey, the total scores of the six pupils in the multi-age class were distributed noticeably lower than those of the pupils in the regular classes. Four of the six pupils in the multi-age class, compared with seven of the 68 pupils in the regular Grade 6 classes, had total scores of 42 or less.

TABLE V: SUMMARY OF RESULTS ON THE VANCOUVER SURVEY TEST IN ARITHMETIC (GRADE 3) FOR PUPILS IN MULTI-AGE AND REGULAR CLASSES AT THE YEAR THREE LEVEL, CARNARVON ELEMENTARY SCHOOL, VANCOUVER, MAY 29 - JUNE 2, 1972.

	Part 1 (Max. Score 48)		Part 2 (Max. Score 12)		Total (Max. Score 60)	
	Multi-Age	Regular	Multi-Age	Regular	Multi-Age	Regular
Number of Pupils	21	48	21	48	21	48
Mean Raw Score	27.57	42.48	6.29	11.00	33.86	53.48
Standard Deviation	13.26	5.73	4.38	1.88	17.09	7.02
Difference Between Means	14.91		4.71		19.62	
"t" Value of Mean Difference	4.84*		4.64*		4.96*	

*Significant at .001 level

Conclusions and Recommendations

The limitations of this study prevent firm conclusions being drawn from it. No statistical support was found for the expectation that multi-age class composition would lead to improvement of children's self-concepts and attitudes toward school. The study does not, however, justify rejection of that hypothesis; further experimentation and research, more tightly designed, is needed.

The study suggests that multi-age class composition may bring about individualization of the pace of instruction, but suggests no necessary relationship between multi-age classes and individualization of instruction in any other respect. It suggests that multi-age classes may lead teachers to encourage children to help each other in those parts of the program in which the pace of instruction is individualized. The study does not, however, lend statistical support to the notion that improvement of children's self-concepts and attitudes toward school is brought about through individualization of the pace of instruction and encouraging children to help each other. These relationships, also, need further investigation.

The many positive opinions expressed by teachers and children in multi-age classes seem inconsistent with the data from the Self-Concept Scale and Pupil Behaviour Inventory. This inconsistency underlines the need for further study of multi-age classes. The opinions also imply that there may be important differences between younger and older multi-age classes, which should be investigated.

The study indicates, finally, that there is a need to examine the effects on academic achievement of multi-age class composition, individualization of the pace of instruction, and encouraging children to help each other.

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APPENDIX A

SELF-CONCEPT SCALE

SCHOOL: _____

NAME: _____

SEX: ☐ Boy ☐ Girl

DIRECTIONS:

On the following pages are a series of statements people sometimes use to describe themselves. Please read each statement carefully and decide whether or not it is true for you.

If you think a statement is true for you or describes how you feel most of the time, check the TRUE square.

If you think a statement is not true for you or does not describe how you feel most of the time, check the NOT TRUE square.

This is NOT A TEST and so everyone should express his own opinion for each statement. Therefore, since everyone is expected to think differently, there are no right or wrong answers, so respond to each statement as honestly as you can.

	TRUE	NOT TRUE
1. I like to meet new people.		
2. I can make up my mind without too much trouble.		
3. School work is fairly easy for me.		
4. I am satisfied to be just what I am.		
5. I wish I got along better with other children.		
6. It takes me a long time to get used to anything new.		
7. I usually like my teachers.		
8. I am a cheerful person.		
9. Other children are often mean to me.		
10. Someone always has to tell me what to do.		
11. I often feel upset in school.		
12. I often let other kids have their way.		
13. Most children have fewer friends than I do.		
14. I really don't like being a boy -- girl.		
15. I can always get good grades if I want to.		
16. I can always be trusted.		
17. I am easy to like.		
18. I can make up my mind and stick to it.		
19. I forget most of what I learn.		
20. I am popular with kids my own age.		
21. I am a good student.		
22. Kids pick on me very often.		
23. I often volunteer in school.		
24. I am a happy person.		

	TRUE	NOT TRUE
25. I am lonely very often.		
26. I always know what to say to people.		
27. I am popular with girls.		
28. I often do things that I'm sorry for later.		
29. Older kids do not like me.		
30. I'm doing the best work that I can.		
31. I often get discouraged in school.		
32. I wish I were younger.		
33. I am usually friendly toward other people.		
34. There are lots of things about myself I'd change if I could.		
35. My teacher makes me feel I am not good enough.		
36. I often wish I were someone else.		
37. Most people are better liked than I am.		
38. I like it when my parents visit the school.		
39. I am slow in finishing my school work.		
40. I am often unhappy.		
41. I am popular with boys.		
42. I get upset easily when I'm scolded.		
43. I can give a good report in front of the class.		
44. I am not as nice looking as most people.		
45. I don't have many friends.		
46. I tell my friends what school I go to.		
47. I am proud of my school work.		

	TRUE	NOT TRUE
48. If I have something to say, I usually say it.		
49. I am among the last to be chosen for teams.		
50. I expect to be a success in life.		
51. I am a good reader.		
52. I don't worry much.		
53. It is hard for me to make friends.		
54. We have a lot of fun at our school.		
55. I am not doing as well in school as I would like to.		
56. I am a good person.		
57. Kids usually follow my ideas.		
58. People boss me around too much.		
59. I find it hard to talk in front of the class.		
60. I often feel ashamed of myself.		
61. I wish I had more close friends.		
62. I like going to school.		
63. I am good in my school work.		
64. I find it hard to stick to one project for very long.		
65. Sometimes I am hard to be friendly with.		
66. I wish I could go to some other school.		
67. I like to be called on in class.		
68. I wish I were a different person.		
69. I am fun to be with.		
70. School work is too hard for me.		
71. My classmates think I am a good student.		

	TRUE	NOT TRUE
72. I am sure of myself.		
73. Often I don't like to be with other children.		
74. I can't be depended on.		
75. I would like to stop coming to school.		
76. I can usually take care of myself.		
77. I would rather play with kids younger than I am.		
78. Teachers expect too much from me.		
79. I can disagree with my teacher.		
80. I have only a few friends in school.		

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APPENDIX B

PUPIL BEHAVIOUR INVENTORY

PUPIL BEHAVIOR INVENTORY

Pupil Name_____ Teacher_____

Please write in for each item the letter(s) of the rating chosen for this pupil (see alternatives in box). It is not necessary to spend a great deal of time in assessing the pupil. Please answer all items, even if you are uncertain or have little information. If you cannot answer an item, please write in "don't know."

/

ALTERNATIVE RATINGS
VF--Very Frequently
F--Frequently
S--Sometimes
I--Infrequently
VI--Very Infrequently

		Leave Blank
_____	Shows initiative	2
_____	Blames others for trouble	1
_____	Resistant to teacher	1
_____	Alert and interested in school work	2
_____	Attempts to manipulate adults	1
_____	Appears depressed	3
_____	Learning retained well	2
_____	Absences or truancies	5
_____	Withdrawn and uncommunicative	3
_____	Completes assignments	2
_____	Influences others toward troublemaking	1
_____	Inappropriate personal appearance	5
_____	Seeks constant reassurance	4
_____	Motivated toward academic performance	2
_____	Impulsive	1
_____	Lying or cheating	5
_____	Positive concern for own education	2
_____	Requires continuous supervision	1
_____	Aggressive toward peers	1
_____	Disobedient	1
_____	Steals	5
_____	Friendly and well-received by other pupils	3
_____	Easily led into trouble	1
_____	Resentful of criticism or discipline	1
_____	Hesitant to try, or gives up easily	2
_____	Uninterested in subject matter	2
_____	Disrupts classroom procedures	1
_____	Swears or uses obscene words	5
_____	Appears generally happy	3
_____	Poor personal hygiene	5
_____	Possessive of teacher	4
_____	Teases or provokes students	1
_____	Isolated, few or no friends	3
_____	Shows positive leadership	2